Foreword

AS A CHILD between the ages of six and twelve, just about all of my free time was spent in what we kids called The Woods. The Woods lay across the road from my home, a 70-acre forested island surrounded by a surging sea of suburban housing. Without any instruction, I learned how to differentiate trees solely by the appearance of their bark. The shaggy-barked trees were found in the skunk cabbage–covered lowlands, the smooth, gray-barked trees in the drier uplands, and the elegant trees with their soaring, straight trunks in between. It wasn't until many years later, in a dendrology course at the University of New Hampshire, that I learned that these trees had names: red maple, American beech, and tulip tree, respectively.

Ever since that dendrology course, I've wondered why leaf and twig characteristics are the major focus for tree identification. As a young child out in The Woods, I was oblivious to leaves and twigs, but the bark and trunks of trees were always right in front of me. Given that New England broadleaf trees are leafless for more than half the year and critical identification features such as buds often can't be seen from the ground, why the emphasis on leaves and twigs? And even more perplexing, why was there no field guide for identifying trees by bark? The answers to those questions grew clearer when Michael Wojtech asked me to serve as his thesis committee chair in 2003.

At that time Michael was a student in our Conservation Biology Program at Antioch University New England. As we discussed his idea of creating a field guide to regional trees, we both began to see why identifying trees by bark might prove to be a complicated project. In this regard black birch offers an illuminating example.

The bark of black birch goes through four distinct transformations as the tree matures from a sapling to an old-growth monarch. The tree starts out with smooth, black bark etched with horizontal, white lenticels. After about 50 years, the smooth bark starts to crack open, creating vertical fissures. By 100 years of age, these

fissures develop into large rectangular plates that curl away from the trunk. At 150 years, most of the rectangular plates are shed, leaving the tree once again with smooth bark—this time lacking lenticels. When a black birch is two centuries old, the bark develops vertical ridges, making it look like some sort of exotic oak.

Michael and I wondered how any guide could incorporate all of these changes in bark characteristics, not only for black birch, but for dozens of other trees. Not to mention the fact that, with some species, even the bark of similar-aged trees can look very different. In my woodlot in Westminster, Vermont, I have a number of 100-year-old red maples. Some of these trees have coarse, shaggy bark reminiscent of a shagbark hickory, while others aren't at all shaggy.

Michael had ventured into a task far more complex than either of us had originally anticipated. However, two of his hallmarks are patience and perseverance. I can't recall the precise number of iterations that the keys to this field guide underwent, but I don't doubt that it was close to a dozen, with Michael ironing out the wrinkles we had uncovered each time.

Through all of this hard work, Michael has created a useful reference that I am confident will garner a large following. His book occupies a niche unto itself. Besides helping people to identify trees while walking though the forest, this guide also reveals the unique tales that tree barks have to tell—stories that explain why the bark of paper birch has evolved to peel or why the black cherry covers its trunk in thousands of scales. One of my personal favorites relates to the rain-soaked trunks of the American beech: they serve as pastures for algae-grazing slugs.

The bark of trees has been relegated to the background for too long. With this guide, Michael Wojtech has prepared a forested pageant for our eyes. I encourage anyone who picks up this book to become acquainted with our sylvan neighbors, as I did more than 50 years ago, by the wonderful ways in which they cloak their strong frames.

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Preface

Perhaps the most radical thing we can do is to stay at home, so we can learn the names of the plants and animals around us; so that we can begin to know what tradition we're part of.
—Terry Tempest Williams

EVERYWHERE I GO I meet people who want to know more about trees. Some, such as those I studied with while earning my Master's degree in Conservation Biology at Antioch University New England, have professional motivations—to determine vital habitats for endangered plants or animals, to prioritize landscapes for preservation, to teach tree identification skills to others. As environmental professionals, we look at individual elements in a landscape and see how they connect together.

I have also listened to others—dancers, teachers, carpenters, businesspeople, parents—about their desire to become familiar with the trees in their local forests. What I feel from everyone, professional or not, is an overriding, foundational desire to make connections with the land where they live, work, or play, be it a wild preserve or a wooded urban lot. A forest as a monochromatic green landscape in summer or a blur of browns and grays in winter can seem remote, distant. Relating to the individual pieces of the forest is an intimate act that can bring us closer to the connection we long for. Beyond the practical, we hope to see the trees through the forest.

When I moved to New England to attend school it was difficult to live in a new town where I didn't know anyone. But it was even more unsettling to find the local forests so unfamiliar. I had left behind the pine barrens of New Jersey, and found myself surrounded by new tree species. I made my first intimate friends here not with the neighbors on my street, but with the trees in a local conservation area as I learned their names—a shaggy yellow birch (*Betula alleghaniensis*) with broad, stout branches that once spread out over a pasture; the young American elms (*Ulmus*

americana) growing on the slope adjacent to a wetland; the eastern hemlocks (*Tsuga canadensis),* with cathedral-like open space and a carpet of orange needles below their branches. As Mitchell Thomashow writes in *Bringing the Biosphere Home*: "I find solace in the stability of my home landscape, believing that with increased awareness of the flora and fauna of this place, I will no longer be a transient, one who just passes through. Via intimacy with the local ecology, I aspire to become native."

I have spent countless hours—wandering through forests observing trees, scouring a shelf full of books and journal articles, even leaning out my car window—looking for some nuance of bark that might improve my ability to describe it to others. As tree species have adapted over time to different environmental conditions such as fire, moisture levels, disease, and the influence of animals, their barks have developed a wide variety of textures, shapes, and colors that can be challenging to interpret. Many sources state that identifying trees by their bark requires the "experience" of botanists, foresters, and others who spend much time in the woods. With this book, naturalists at all levels of experience can learn the bark characteristics of trees in the Northeast.

As you focus on bark—and improve your ability to see—I hope that other, equally intimate layers of the forest also become apparent. You may notice the woodpecker mining for ants on a tree trunk; see fox scat on a nearby rock; spot the flowers of an early spring hepatica, almost hidden among last year's leaves. There are always new discoveries to be made. I had been searching for a good specimen of young black cherry (*Prunus serotina*) to photograph for quite some time when I found a suitable tree along the dirt road that I live on—a tree I had walked past hundreds of times without noticing. The art of seeing, and the connection to place, grows exponentially when you learn to stop and observe.

If you want to experience a forest, mingle among its trees. If you want to know the trees, learn their bark.